Occam's Razor and Cryptozoology

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Occam's razor, stated by and named after a Franciscan friar and logician, is a principle that declares that no more assumptions should be made than necessary to explain a certain occurrence. Originally stated in Latin as *"Pluralitas non est ponenda sine necessitate,"* this principle urges scientists to refrain from making extraneous assumptions and forming unconventional conclusions. Occam's Razor provides a systematic and heuristic approach to explain a phenomenon, contrary to the pseudoscientists' approach to forming biased and self-fulfilling opinions. Promulgators of a pseudoscience usually have very different views form mainstream scientists because they fail to abide by Occam's Razor. An example of such a pseudoscience at the center of much debate and criticism today is cryptozoology.

Cryptozoology is the search for animals that have not yet been confirmed to exist or are considered to be extinct. This study includes the search for animals such as the Loch Ness monster, Bigfoot, Chupacabra, and the Yeti. The origin of most of these animals is from legends, myths, and unreliable photos; the belief in their alleged existence has been conjured completely from anecdotal information ("Cryptozoology", 2012). The term, cryptozoology, was coined by zoologist Bernard Heuvelmans even though he attributes it to adventurer Ivan T. Sanderson (Schembri 2011). Pseudoscientists generally display a stubborn attitude to others' opinions and are assured that their work is accurate and infallible. The promulgator is unjustifiably determined in the accuracy of their work and feels unjustly discriminated against when their books are overlooked or disregarded as incompetent in the real science world. Also, they tend to use words and phrases coined by themselves to explain their own work (Shermer, 2010). In the article, "Hermits and Cranks," Michael Shermer comments that pseudoscientists do not even have an understanding of how the scientific process functions and that they have a tendency towards paranoia. Working in isolation and without support, the general population of pseudoscientists can be classified as hermits.

Cryptozoologists make assumptions to initiate and advocate their claim that these elusive and sometimes fictional animals are currently living. These rare organisms are supposedly scarce enough to be able to evade detection, but are common enough for humans to have been purported eye witnesses of these animals. Several images, stories from supposed first hand eye witnesses, and archaic tales do make these animals seem true, but the validity of this data is immersed in ambiguity. The promulgators assume that these animals have been able to breed and survive without scientists ever being able to find a corpse, skeleton, or remains of these creatures.

These erratic assumptions would be rejected with the use of Occam's razor which greatly simplifies the claim from its embellishments. A common scientist would make reasonable assumptions about such claims, especially when there is no evolutionary history, recorded mating behavior, or any other information about these organisms that would reveal their existence. The sightings of these animals can easily be attributed to optical deception. Those who claim to have been eye witnesses might have actually experienced some distorted illusion and mistaken what they perceived for an actual organism sighting. Another plausible theory is

that common people are creating impressive scenarios and believable descriptions that are easily absorbed as sensational news by an audience.

While cryptids are always sensational topics for the public, Occam's Razor easily demonstrates how a phenomenon can easily be erroneously elaborated. There is no data that backs the assumptions made by cryptozoologists. The difference in perception of those who claim to have seen such organisms and the invalidity of the information are major points on which cryptozoology is criticized as a pseudoscience (Shermer, 2010). It can be concluded that the general population's interest and fascination in the possibility of the existence of fairytale creatures keeps this pseudoscience alive rather than actual facts and data.

Literature Cited

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Pseudoscience is a highly debated subject that spans a broad range of topics. There is plenty of contradiction between the promulgators of a pseudoscience and mainstream scientists. This can be attributed to the differences in their initial assumptions made to theories and various phenomena. This difference is described in a principle of philosophy called Occam's Razor. Because pseudoscientists tend to jump to conclusions, Occam's Razor refers to keeping assumptions simple and the most scientifically practical even when it may not be accurate. In other words, one should not make erratic assumptions instantaneously to explain what might have been a much simpler phenomenon. An example of such a pseudoscience experiencing much criticism today is cryptozoology.

Paragraph 1:

Occam's razor, named after a Franciscan friar and logician, is a principal that states that no more assumptions should be made than necessary to explain a certain occurrence. This principal urges scientists to refrain from making extraneous assumptions and forming unconventional conclusions. Occam's Razor raises a systematically heuristic approach forming a theory or explaining a phenomenon, unlike the pertinacious opinions of pseudoscientists. Promulgators of a pseudoscience usually have very different views form mainstream scientists because they fail to abide by Occam's Razor. An example of such a pseudoscience at the center of much debate and criticism today is cryptozoology.

Because pseudoscientists tend to jump to conclusions, Occam's Razor refers to keeping assumptions simple and the most scientifically practical even when it may not be accurate. In other words, one should not make erratic assumptions instantaneously to explain what might have been a much simpler phenomenon. An example of such a pseudoscience at the center of much debate today is cryptozoology.